

IN THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application.
Material inserted is indicated by underlining and material deleted is indicated by ~~strikeout~~.

Listing of Claims:

1. (Currently Amended) An isolated nucleotide sequence ~~encoding~~ which encodes a mammalian EDG-5 receptor or biologically active fragment thereof, wherein said biologically active fragment is capable of activation by LPA.

2. (Currently Amended) The isolated nucleotide sequence of claim 1 ~~encoding~~ wherein said receptor is a murine EDG-5 receptor ~~or biologically active fragment thereof.~~

3. (Currently Amended) The isolated nucleotide sequence of claim 2 ~~encoding a murine EDG-5 receptor of~~ wherein said receptor comprises the nucleotide sequence set forth in Figure 1B (SEQ ID NO:22) ~~or biologically active fragment thereof.~~

4. (Currently Amended) The isolated nucleotide sequence of claim 1 ~~encoding~~ wherein said receptor is a human EDG-5 receptor ~~or biologically active fragment thereof.~~

5. (Cancelled)

6. (Previously Amended) An isolated nucleotide sequence selected from the group consisting of:

(a) the nucleotide sequence comprising nucleotides 36-1907 of SEQ ID NO: 12

- (b) the nucleotide sequence of Figure 3B (SEQ ID NO: 24);
- (c) the nucleotide sequence of Figure 3C (SEQ ID NO: 25);
- (d) the nucleotide sequence comprising at least about 70% sequence identity to (a), (b) or (c) and which hybridizes under stringent conditions to the nucleotide sequence of (a), (b) or (c), respectively; and
- (e) the nucleotide sequence which encodes the amino acid sequence of Figure 4A (SEQ ID NO: 14), 4B (SEQ ID NO: 27) or 4C (SEQ ID NO: 28).

7. (Original) The isolated nucleotide sequence of Claim 6 wherein the nucleotide sequence is selected from the group consisting of:

- (1) the nucleotide sequence of (a), (b), (c) or (e) of claim 6; and
- (2) the nucleotide sequence of (d) of claim 6 wherein the nucleotide sequence has at least about 80-85% sequence identity to the nucleotide sequence of (a), (b) or (c) of claim 6.

8. (Original) The isolated nucleotide sequence of Claim 6 wherein the nucleotide sequence is selected the group consisting of:

- (1) the nucleotide sequence of (a), (b), (c) or (e) of claim 6; and
- (2) the nucleotide sequence of (d) of claim 6 wherein the nucleotide sequence has at least about 95% sequence identity to the nucleotide sequence of (a), (b) or (c) of claim 6.

9. (Original) The complement of the nucleotide sequence of Claim 8.

10. (Original) An expression vector comprising the nucleotide sequence of Claim 8.
11. (Original) A host cell comprising the expression vector of Claim 10.
12. (Original) The isolated and purified amino acid sequence for the HEDG-5 receptor encoded by the nucleotide sequence of claim 8.
13. (Currently Amended) The ~~isolation~~ isolated and purified amino acid sequence of claim 12 comprising the amino acid sequence of SEQ ID NO: ~~13~~ 14 (Figure 4A), Figure 4B (SEQ ID NO: 27) or Figure 4C (SEQ ID NO: 28) or a biological active portion thereof, wherein said biologically active portion is capable of activation by LPA.
14. (Currently Amended) The isolated nucleotide sequence of Claim 6 wherein the nucleotide sequence is selected from the group consisting of the nucleotide sequence which encodes the amino acid sequence of SEQ ID NO: ~~13~~ 14 (Figure 4A), Figure 4B (SEQ ID NO: 27) and Figure 4C (SEQ ID NO: 28).
15. (Original) A hybridization probe of the nucleotide sequence of Claim 5.
16. (Currently Amended) A method of screening ~~compounds~~ to identify a compound that binds to HEDG-5 ligands comprising the steps of:
 - (a) culturing cells which express the HEDG-5 receptor or with a membrane preparation obtained therefrom; and
 - (b) contacting a test compound with said cells or said membrane preparation; and
 - (c) determining ~~whether~~ binding between the HEDG-5 receptor and said compound ~~the candidate ligand~~ has occurred.

17. (Cancelled).

18. (Currently Amended) A method of screening ~~compounds~~ to identify a compound that inhibits binding of a ligand to HEDG-5~~antagonists~~ comprising the steps of:

- (a) culturing cells which express the HEDG-5 receptor or with a membrane preparation obtained therefrom;
- (b) contacting said cells or said membrane preparation with a mixture comprising ~~an~~ agonist a ligand and ~~said compound to be tested for antagonist activity at said receptor~~ a test compound; and
- (c) determining the ~~degree of antagonist~~ inhibition activity by measuring a response indicative of the degree of binding between said ~~agonist~~ ligand and said receptor and comparing this measured response with a standard response for binding between said ~~agonist~~ ligand and said receptor absent ~~the antagonist~~ said test compound.

19. (Currently Amended) The method of claim 18 wherein said ~~agonist~~ ligand is LPA.

20. (Cancelled).

21. (New) The isolated nucleotide sequence of claim 6, wherein said stringent conditions are under 4.8 x SSC at 42°C.

22. (New) The isolated nucleotide sequence of claim 6, wherein said stringent conditions are under about 5°C to about 20°C - 25°C below the melting temperature of the nucleotide sequence of (a), (b) or (c).